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(71) Applicant: **TORAY IND INC**

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(54) SHADING KNIT FABRIC

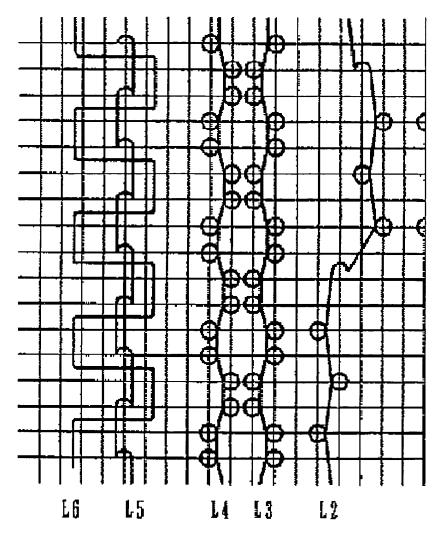
(57) Abstract:

PROBLEM TO BE SOLVED: To obtain lightweight knit fabric excellent in shading properties and having high cushioning properties and air permeability.

SOLUTION: In this shading knit fabric, an occupation rate of a synthetic fiber filament (A) containing 1-25wt.% dispersed ceramic-based particles in the face side surface is $\geq 20\%$ and the maximum value of the spectral reflectance of the surface in 0.76-2µm wave length region is 60-85%. The knit fabric can be knitted by using a sheath-core type synthetic fiber filament (B) having 75-95% volume ratio of a core part, containing ≥ 1wt.% ceramic-based particles in the core part and ≤1wt.% in the sheath part and having ≥ 0.3 wt.% content difference of the ceramic-based particles between the core part and

the sheath part. A water repelling processing is carried out on the outer side surface and the water absorbing processing is carried out on the skin side surface. Cushioning and air permeable performances are enhanced by bringing the fabric in a multiple layer structure and forming the fabric with smaller monofilament denier in the outer layer and larger monofilament denier in the middle layer compared with that of the outer layer, thus the fabric is suitable for outdoor sports shoes.

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